

J. B. WISE.
WASTE FITTING.
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1,008,400.

Patented Nov. 14, 1911.

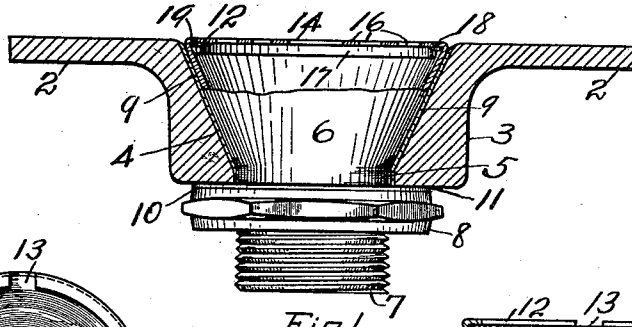


Fig. 1.

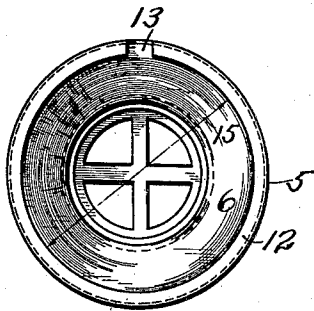


Fig. 2.

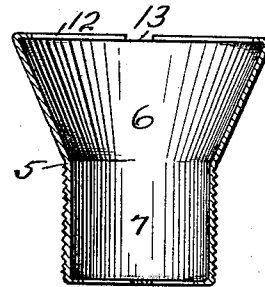


Fig. 3.

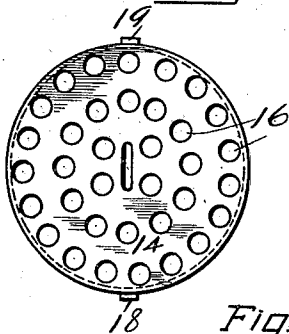


Fig. 4.

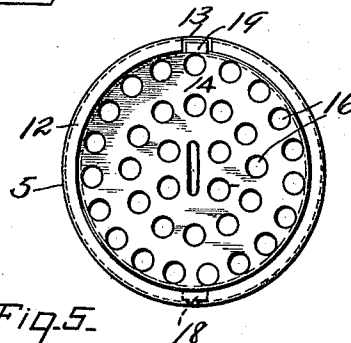


Fig. 5.

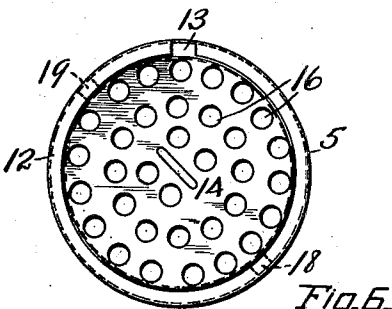


Fig. 6.

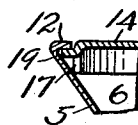


Fig. 9.

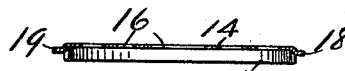


Fig. 7.

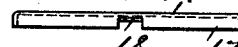


Fig. 8.

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WASTE-FITTING.

1,008,400.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES B. WISE, a citizen of the United States, residing at Watertown, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Waste-Fittings, of which the following is a specification.

This invention relates to improvements in waste fittings designed for use in connection with sinks, lavatories, bath-tubs and the like, and has for its object to provide a simple, strong, convenient and inexpensive fitting of the class, consisting of but two parts, capable of being connected and interlocked to each other for service, without the use of any extra parts.

A particular object is to provide a waste fitting comprising a waste-thimble and a removable strainer therefor, and in providing means associated with both the thimble and the strainer for interlocking said parts, as well as, for permitting the removal of the strainer, at will, by unskilled hands, for the purpose of cleaning-out, repairing, or replacing the said parts.

My invention and the novel features thereof may be more readily understood from the detailed description which follows, and by reference to the accompanying drawing, in which—

Figure 1 is a sectional view, showing my improvement applied to a sink or other sanitary part. Fig. 2 is a top plan view of the waste-thimble. Fig. 3 is a central vertical cross-section of the waste-thimble. Fig. 4 is a top plan view of the strainer. Fig. 5 is a top plan view of the complete device; showing the strainer in position to be either locked or removed. Fig. 6 is a similar view; showing the strainer in locked position, ready for service. Fig. 7 is a sectional view of the strainer. Fig. 8 is a side elevation of the strainer. Fig. 9 is an enlarged detail view; showing the method of seating the strainer in the funnel-shaped portion of the thimble.

In the drawing, 2 represents a portion of the bottom of a sink, or other sanitary appliance, which may be made of any suitable material, and which may follow the usual construction of devices of the class. The bottom of the vessel 2 may have a depending portion, as 3, or it may be made plain, and the depending portion may have a port or opening, as 4, for the discharge of water or

other liquid from the vessel. In sinks or vessels of the class herein shown, the opening 4 is usually formed funnel-shaped, either in whole or in part. In most such sanitary devices, some form of waste fitting is inserted through the opening 4, and connects with other parts for conducting the contents of the vessel to a drain or sewer. In the present case, the waste fitting comprises a waste-thimble 5, which consists of a funnel-shaped portion 6, arranged to conform to the expanded portion of the opening 4 of the sink, and a tubular portion 7, which projects below the depending part of the sink. The external surface of the tubular part of the thimble is threaded for receiving a nut 8, which is employed for securing the fitting to the sink. The tightening up of the nut 8 draws the bell-shaped portion of the thimble tightly into the opening 4 of the sink, and a packing, as 9, may be interposed between the thimble and the flaring inner surface of said opening for making a water-tight joint. Sometimes a washer, as 10, and a packing, as 11, are employed for sealing the lower end of the port 4. The free end of the funnel-shaped part 6 of the thimble is bent inwardly at right angles to the axis of the thimble, for forming an annular flange 12, which coöperates with parts of a removable strainer for inter-locking the said parts. The flange 12 is continuous, except at one point, where a portion of the flange is cut-away to provide a radial gap 13, for use in applying and removing the strainer.

14 represents the removable strainer, consisting of a sheet metal disk or part, the body portion of which is circular and has a diameter about the same as the inner diameter of the flange 12, as indicated by the line 15 in Fig. 2. The body portion of the strainer is perforated or slotted at frequent intervals, as at 16, for effecting the draining or straining of the water or other contents of the sink, which pass into the waste thimble. The peripheral edge of the strainer is bent downwardly at right angles to the body, to form a depending lip or flange 17, as best seen in Figs. 1, 7, 8 and 9. The object of the flange 17 is to provide a means of supporting the strainer within the funnel-shaped mouth of the thimble, as well as, for stiffening the strainer, which may be made of comparatively thin metal. Under this arrangement, when the strainer is in-

serted in the mouth of the thimble, the free edge of the flange 17 contacts with the inclined surface of the thimble, and thus holds the strainer substantially level and prevents it from tilting. The depending flange 17 of the strainer is unbroken, except at two points, where the flange is slitted and the metal is bent outwardly to form oppositely disposed radial lugs or tongues 18 and 19, the said lugs being arranged at right angles to said flange, and in a slightly lower plane than the top of the disk 14.

To apply the strainer to the thimble 5, the circular part 14 is placed over the expanded mouth of the thimble, and then tilted or inclined, so as to permit one of the tongues or lugs, as 18, to pass beneath the flange 12 of the thimble, this will allow the circular body of the strainer to enter the contracted flaring opening or mouth of the thimble, when the strainer is rotated until the tongue 19 registers with the gap 13 in the flange 12, which will bring the parts into the relation shown in Fig. 5—being the ready-to-lock position. Then to inter-lock the strainer with the thimble, the operator should rotate the disk 14 a short distance, either to the left or right, which will bring the said parts (if rotated to the left) into the position or relation shown in Fig. 6, in which the dotted lines indicate the tongues or lugs 18 and 19 disposed beneath the flange 12—which serves to hold the parts from accidental displacement or separation—the service position.

When the strainer is inserted in the flanged funnel-mouth of the waste-thimble, and rotated, as described, for interlocking it with the thimble, the lower edge or free margin of the flange 17 comes to a substantial bearing upon or against the inclined walls 6 of the thimble, so that the strainer will be held substantially level and firm when the parts are assembled and interlocked, as shown in Figs. 1 and 9.

In the drawing I have shown the face of the strainer level or horizontal, but the perforated or straining portion of this part may be either concave or convex and perform its functions equally well; the level style

being the cheaper and less troublesome to make.

In the preferred form of the invention, as shown, both the waste-thimble and the strainer are formed-up out of sheet or wrought metal by the use of suitable dies or drawing tools, but the said parts may also be made out of cast metal. Any suitable number and arrangement of the openings, as 16, in the strainer may be employed without affecting the usefulness and working of the device, the important features of the invention consisting of the means for interlocking and rendering the strainer removable at will, for the purpose of cleaning-out or repairing the waste passage, without the use of extra parts or special tools, and without requiring any skill on the part of the operator.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is—

1. In combination, a one-part waste-thimble having a tubular body and a flaring top, the extreme upper end of the thimble being bent inwardly for forming an annular flange to support a strainer, and a strainer having peripheral radial lugs engaging said flange, and having a depending flange engaging the inner surface of the flaring top of the thimble for supporting and holding the strainer flush with said annular flange.

2. A waste-fitting, comprising a thimble having a flaring mouth the free edge of the flaring portion bent inwardly to form an annular flange, and a circular strainer having a depending annular flange engaging the flaring portion of the thimble below its annular flange, whereby the strainer is held flush with the top of the thimble, said strainer having radial lugs formed out of its depending flange adapted to engage the flange of the thimble for holding the strainer in place.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES B. WISE.

Witnesses:

W. J. FORRING,

W. M. KRETSCHMER.